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ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: FLUORESCENT PROTEINS AND CHROMOPROTEINS FROM NON-AEQUOREA HYDROZOA SPECIES AND METHODS FOR USING SAME

(57) Abstract: The present invention provides nucleic acid molecules encoding a fluorescent and chromo- proteins and mutants, variants and derivatives thereof, as well as proteins and peptides encoded by these nucleic acids. The nucleic acid molecules and proteins of interest are isolated from non-Aequorea Hydrozoa species. The proteins of interest include yellow fluorescent protein, phiYFP, from Phialidium sp., green fluorescent protein hydr1GFP and purple chromoprotein, hm2CP from hydroid medusae of sub-order Anthomedusae. Also of interest are proteins that are substantially similar to, or derivatives, or homologues, or mutants of, the above-referenced specific proteins. Also provided are fragments of the nucleic acids and the peptides encoded thereby, as well as antibodies specific to the proteins and peptides of the invention. In addition, host-cells, stable cell lines and transgenic organisms comprising above-referenced nucleic acid molecules are provided. The subject protein and nucleic acid compositions find use in a variety of different applications and methods, particularly for labeling of biomolecules, cell or cell organelles. Finally, kits for use in such methods and applications are provided.

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# INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

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## B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched:

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	Cubitt AB at al, Understanding, improving and using green fluorescent proteins, Trends Biochem Sci.1995 Nov, 20(11):448-55,abstract	1,2
Y	IGFL A. CHAIN A, Structure of Green Fluorescent Protein, Aug. 23, 1996,	5-24
A	IGFL A GI: 1942689	3,4
Y	JP 10-234382 (DEINABETSUKU KENKYUSHO:KK) 08.09.1998, abstract, claim	5-8,11-14,20-24
Y	US 6232107 (BRYAN BRUCE J. et al.) May 15, 2001, claims 12-21,39,40,50-54,61,63	18
Y	US 5976796 (LOMA LINDA UNIVERSITY) November 2, 1999, claims 1-5	15-17,19
Y	WO 9741228 (GORDON-KAMM WILLIAM et al.) 06.11.1997, claims 16,17	9
Y	CA 2331882 (WISCONSIN ALUMNI RES FOUND) 20.01.2000, claim 1	10

Further documents are listed in the continuation of Box C.

☐ See patent family annex

* Special categories of cited documents:	"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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